

ABSTRACT

[077] What is disclosed is a process and apparatus for subjecting carbon nanotubes containing a species, or elements such as hydrogen, oxygen, nitrogen and argon in air, in an inert gas chamber, in vacuum or under ultrahigh vacuum (“UHV”), to microwave radiation for certain predetermined amounts of time. The result of said process and apparatus is heat release, light emission and gas evolution, accompanied by intense mechanical motion and carbon nanotube reconstruction. An RGA plot (900) illustrates the outgassed materials from carbon nanotubes during microwave application.